

Weather Station Temperature Sensor Recalibration

Field Guide

Task

Compare the temperatures recorded by your weather station with readings from a calibration thermometer.

What You Need

- ☐ Calibration thermometer that has been checked following the instructions in the *Thermometer Calibration Lab Guide*
- ☐ *Weather Station Calibration Data Sheet*

In the Field

1. Hang the calibration thermometer in the shade within 30 cm of the temperature sensor of your weather station.
2. Wait three minutes and then read the temperature from the calibration thermometer as well as the temperature from your weather station. Wait one more minute to see if the calibration thermometer reading is changing. If it is, continue until it stops changing. If the digital display for your weather station is located well away from the calibration thermometer, this may require two students cooperating. Record these readings on your *Weather Station Calibration Data Sheet*.
3. Repeat step 2 four more times, waiting at least one hour between each set of readings. Try to space out the five sets of readings over as much of the day as possible.
4. Report your new calibration data to the GLOBE Web site.